Conclusions and Closure

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ICRER Online event 2021

- New data and knowledge, improved models and methods, and human and environmental protection philosophy were presented by:
  - Experts from international organizations
  - Experts coming from different research groups and organizations around the world

- Audience – about 450 registered participants from all continents
Key messages - international cooperation

• International cooperation and joint research is crucial for getting the proper perspective of radiation protection issues and consideration of exposure doses to public, workers and non-human biota

• Integration activities within radioecology, but also integration of radioecology with other related disciplines has evolved during the recent years for the benefit of the global radiation protection community

• Many successful joint international projects have had spin-offs in different contexts and for different subjects (new research projects, changes in recommendations and doctrines, legislative changes, etc)
Key messages - importance of ethical and societal factors

• Need to address ethical, social and economic aspects
• Shift from the previous rigorous technical and scientific way to more affected area/people centred studies and programmes
• Complex interaction between society, economy and environment including man – it is important to consider these holistically in an eco-centric system based approach
Key messages - ecosystem approach

• Shift from anthropocentrism towards ecocentrism, where all complex and interrelated conditions are considered in an integrated manner

• Transfer, uptake, dose assessments

• Biological effects → ecosystem effects

• Multiple stressors
Key messages - radioecology & radiation protection

• Results from radioecology is essential in radiation protection regulations

• The ERICA Assessment Tool – used in planned, existing and emergency situations for NORM industry, nuclear facilities, radioactive waste management, decommissioning, etc.

• ERICA 2.0: new dosimetry, updated CRs, $K_d$'s, recalculated EMCLs, adding multiple-organisms function, inclusion of noble gasses and Rn
Key messages - management of nuclear and other legacies

- Wide range of radiological, chemical and physical hazards to be addressed, as well as complex social contexts
- Using a harmonized and proportionate risk management approach to decommissioning, legacy and waste management (practical application of optimization)
- Need for an effective dialogue between relevant stakeholders addressing all different hazards, benefits and disadvantages
Key messages - Trends in Radioecology

• Scientific articles increasing trend
• Bias, pre-print publication, peer review process, fake news
• Proper hypothesis setting, proper and accurate measurements; bias, use and misuse of statistics, repeatability of the experiments and results
• Negative results need to be published more
• International scientific exchange and debate on results and emerging theories beneficial
ICRER 2022: 4 – 9 September 2022 in Oslo

• Now open for registration

• Abstract deadline 28 February 2022

• Please visit www.icrer.org
Looking forward to welcoming you to Oslo 2022

Photo: Synne Egset, DSA